

ET docket 03-104 raises troubling technical questions in its para. 5 & 7. What ever happened to good engineering practice? A part 15 BPL system would radiate and conduct impossible levels of RFI to licensed users of the spectrum from 4.5 to 21 MHz as evidenced by experiments conducted in Japan and Austria. BPL would eliminate the filtering of other noise sources in the home such as light dimmers by the pole transformer and increase interference from other sources besides BPL. BPL presents hazards of interference that can not be addressed by either Type A or B computer certifications. The alleged advantages to commerce in para. 9 would be offset by the need of licensed radio services to spend money on expensive filters and means to limit the interfering BPL "leaks" over the power lines. This is because, power line conductors are usually spaced too widely in overhead lines to be parallel transmission lines for BPL. Good Engineering practice says that the transmission line for BPL must confine its emissions, not allow radiated fields to bother licensed services. Power lines are too non uniform, (non linear) to provide proper isolation of conducted interference from BPL. The power line was never intended to provide a path for frequencies higher than the power AC, and is entirely unsuited from an interference causing potential to be a pathway for BPL techniques at any useful amplitude. Totally unconsidered by BPL proponents are the many sources of interference to BPL by other Power Line artifacts. In fact, many power companies abandoned carrier current systems as unworkable except on their more technically controlled high voltage transmission systems. They are decidedly unenthusiastic in this area at the prospect of BPL affecting other power line control functions, and the potential harm of BPL. The lack of BPL standard protocols is troubling, and it is felt FCC should require a standard before allowing a part 15

device designation to such a system. After the fact, consumers are not prone to disable a part 15 device that causes interference outside their home as BPL could do. I respectfully request that BPL be sent back to the drawing board, and NOT be allowed in the HF bands, which could make emergency communications by amateur radio operators and their day to day training and communication impossible. They are licensed and valuable prior users of the frequencies and should not be displaced by a part 15 technology! 9 Amateur Radio bands would be partly or fully disrupted by adoption of present BPL devices. The harmonic interference and "white noise" generated by BPL communication would interfere with many of our established emergency services, including police, fire, and paramedic communication service. It would also destroy the ability of a home owners house communications network for those of us that use the house power lines for security device communications. It would be very costly to all consumers to combat the side effects of BPL. The commissioners should listen to the examples of the interference from Austria trials of BPL, and note the disallowance of BPL in Japan, a leading electronic engineering society, well versed in the potential interference BPL technique would create; with its use of non technically suited transmission line paths of existing secondary power lines. Japan recognized good engineering practice and said NO to BPL. I implore you to not pass what is a "novel" and "cute" idea that has far reaching and harmful results.

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